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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,093	09/21/2001	Masaharu Sakata	2803.65851	5060

7590 06/30/2004
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EXAMINER

EVANS, JEFFERSON A

ART UNIT	PAPER NUMBER
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2652

12

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,093

Applicant(s)

SAKATA ET AL

Examiner

Jefferson Evans

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2652

Claims 1 and 3-9 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekhoﬀ (U.S. 6,097,568). Note figure 3 that shows that the wind shield members 42 above and below disks can have shapes that get thinner towards an air exit side of the fingers. Also, Ekhoﬀ notes at column 6 – lines 4 to 11 that the wind shield members may be curved or bent.

Ekhoﬀ does not expressly state that the wind shield members have an air entrance side edge curved guide surface for guiding the air flow to the outside of the disks.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the wind shield members of Ekhoﬀ be provided with an air entrance side edge curved guide surface for guiding the air flow to the outside of the disks. The motivation would have been: Ekhoﬀ discloses that the wind shield members may be curved and as the wind shields of Ekhoﬀ also function to guide air to an outside of the disks (column 6 – lines 18 to 22) so it would follow to have the

Art Unit: 2652

curve of the wind shield member be such that it facilitates the controlled motion of the air flow, including the flow of air towards the outside of the disks.

3. Claims 6 to 9 are allowed. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Response to arguments filed 4-8-2004

Applicant contends that Ekhoﬀ does not disclose an air entrance side edge curved guide surface, that the examiner has not established a proper *prima facie* case for obviousness, and that the Examiner does not assert that Ekhoﬀ suggest the claimed structure.

The Examiner respectfully disagrees. It is noted that applicant does not dispute that Eckhoff's air dams control airflow to the edges of the spinning disk. It is noted that the Examiner has pointed out that Ekhoﬀ that the fingers may be curved or bent (column 6 – lines 10 and 11). The Examiner considered that this disclosure might be adequate to reject the claims under 35 U.S.C. 102, however, Eckhoff does not expressly state that a curved embodiment of the air dams would include a curving of an air entrance edge of one or more of the air dams so the Examiner has rejected claims under 35 U.S.C. 103 and asserts that the air inflow side and its edges, being the side and edges that most directly impact inflow, would be obvious recipients of the disclosed curving and that since an expressly stated function of the air dams is to control flow of air to the outer periphery of the disk, it would naturally follow to have a curvature provided to the air dams be one that assisted

Art Unit: 2652

the control of airflow as opposed to hindering the control of airflow. It is also noted that in the paragraph discussing having the air dams be curved also mentions having the air dams deviate from extending in a linear radial manner and the implications of the paragraph as a whole would be that the air dams could be curved as a whole which would mean both air inflow and air outflow side edges being curved so that a width of an air dam in a direction generally perpendicular to the radial direction of the disk would be generally consistent as one moved along the air dam in a radial direction.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson Evans whose telephone number is 703-308-1610. The examiner can normally be reached on Monday to Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

Application/Control Number: 09/960,093

Page 5

Art Unit: 2652

only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JAE
June 25, 2004

Jefferson Evans
Primary Examiner
Art Unit 2652

**JEFFERSON EVANS
PRIMARY EXAMINER**